

EXECUTIVE SUMMARY

Date, Time and Location of the Accident: 2 October 2006, at 1212L (1712Z) Decatur Airport, IL.

Mishap Aircraft: NC-21A, serial number 84-0066, assigned to the Air Force Flight Standards Agency (AFFSA), Oklahoma City, Oklahoma.

Summary of Events: This was the mishap pilot's (MP) fourth flight since initial qualification training at Keesler Air Force Base, MS and he had a total of 49.6 hours in the C-21. The mishap instructor pilot (MIP) had graduated from instructor upgrade in April 2006 and had a total of 28.1 instructor hours in the C-21. The mishap aircraft (MA), call sign Track 66, on a mission qualification training sortie, was conducting off-station pattern work at Decatur Airport, IL. Shortly before impact, the MP, who was undergoing aircraft commander upgrade training in the left seat, was flying a simulated single-engine (SE) approach to runway 24, simulating the loss of the #2 engine. The MA was on charted approach speed ($V_{ref} + 10$) and on course during the entire instrument approach until going visual for a touch and go (40 seconds prior to impact). As the aircraft crossed over the runway threshold, everything appeared normal. In anticipation for the touch and go, the MP disengaged the yaw damper at approximately 10-20 ft above ground level (AGL). At the same time, the MIP noticed the MA's airspeed rapidly decreasing from $V_{ref} + 5$ to $V_{ref} - 5$ (a loss of 10 knots) in 2 seconds and stated the word "Speed" twice, (2 seconds apart). The MP responded 2 seconds later saying "Oh, OK," and pulled back the #1 engine throttle for the touch and go. The MA then started to yaw to the left. Three seconds later, the MP perceived the MA was becoming unstable and stated "On the Go" while advancing only the #1 engine throttle. The MIP did not assume control of the aircraft nor insure both engines were used as directed in AFI 11-2C-21 Vol 3, AFFSA Supplement. The MA developed a roll to the right and the right wing tip tank made contact with the runway approximately 60 feet right of the centerline and 1,800 feet from the threshold. During the crash sequence, the nose of the aircraft struck the edge of taxiway G3 and the aircraft slid across the grassy infield. The MA came to rest upright and on fire, at N39° 50.2 minutes, W088° 51.4 minutes, just west of the intersection of Taxiways G and G3.

Number of Injuries/Deaths: The MP sustained minor injuries to his hand and bit his tongue. The MIP sustained a broken right foot and left ankle, a bruised left eye and a bruise to his left elbow.

Damage Description: The MA was mostly destroyed upon impact with a loss valued at \$6,409,800. There were scrapes and gouges on Runway 24 and Taxiways G3 & G, as well as fuel saturated soil along the crash path. An FAA L-861 taxiway light was destroyed.

Statement of Opinion: There is clear and convincing evidence the primary cause of the mishap was the crew's failure to take appropriate action after allowing the MA to get 15 knots slow over the runway threshold. The MP got into an asymmetric, slow speed situation in the C-21 that he hadn't seen before and was unable to take the appropriate actions. While the MIP recognized the airspeed deviation; all he did was say, "Speed," twice. He failed to 1) direct the MP to add power; or 2) direct the MP to go-around, and/or 3) take control of the aircraft and go around. The MIP fixated on the left yaw when the MP retarded the #1 engine to attempt a touch and go. The MA then became unstable and the MP attempted to go-around but failed to use both engines. The MIP did not assume control of the aircraft nor insure both engines were used as directed in AFI 11-2C-21 Vol 3, AFFSA Supplement. The MA rolled to the right, the flight controls were now ineffective, and the aircrew was unable to recover. Had either pilot taken proper action to go-around upon seeing the airspeed bleeding away by advancing power on both engines this mishap could have been avoided.

Under U.S.C. 2254(d) any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from the accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.